#19 SUMMER 1999

control NETWORK

The News & Information Resource for Contemporary Controls' Valued Customers

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NEW **The EXTENSION** . . . . . *insert*
Each quarter we will provide a technology focus on a topic of interest in the industrial networking field
This issue:
Revisions to ANSI/ATA 878.1

• *1999 Trade Shows* •

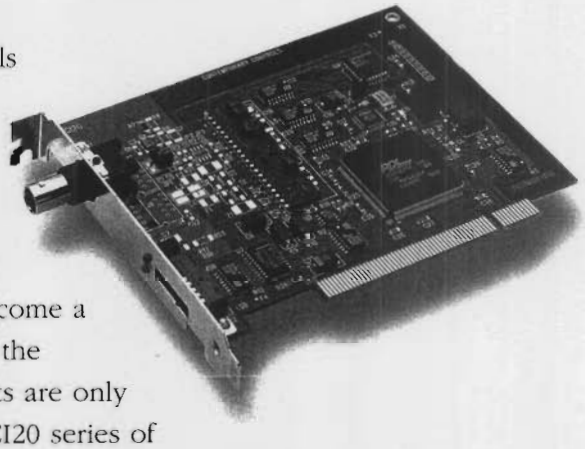
See us at the following trade shows this year!

September 26–30, 1999
Embedded Systems Conference
Booth 7009
San Jose, California USA

October 5–6, 1999
FieldComms
Stand A30
Telford, United Kingdom

November 17–18, 1999
Embedded Systems Conference
Stand 606
Maastricht, Holland

ARCNET ON THE PCI BUS

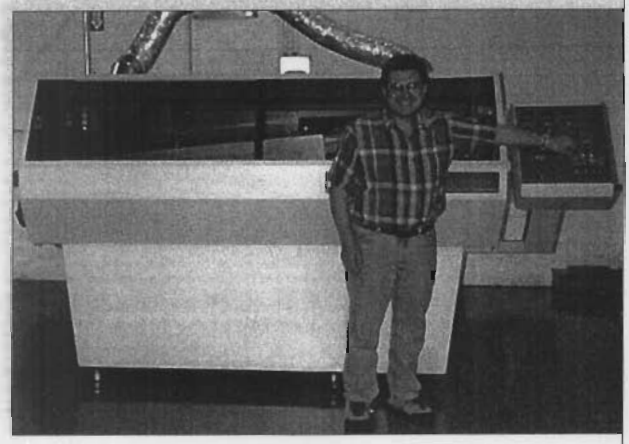


Contemporary Controls recently introduced a series of ARCNET adapters for the high performance PCI bus. With new workstations, spare ISA slots have become a premium since most of the available expansion slots are only for the PCI bus. The PCI20 series of PCI bus compatible COM20020 ARCNET network interface modules maintains register compatibility with the ISA version of the COM20020 adapter (the PCX20), while gaining the benefits of the PCI bus. These benefits include jumperless settings, plug and play operation and a higher speed bus access over the 33 MHz PCI bus.

To operate existing COM20020 software with the new PCI20, enabler software is being provided with the board. Files PCI20.INF and PCI20.VXD allow existing software to operate in a Windows 95 or 98 environment. For those customers interested in our null stack driver, versions are available for 95, 98 or NT. Our NDIS 4.0 driver will also be modified for use with the PCI20.

Future plans call for a PCI19 for the COM20019 and a 16-bit PCI22 for the new COM20022.

The PCI20 is available with several cabling options including coaxial cable, fiber optics and twisted-pair. The list price for the coaxial cable version PCI20-CXS is $245. Availability is from stock.



John Magagnini, Manufacturing Supervisor, shows off his new toy.

New Wave Soldering Machine

As a part of our efforts to modernize our production capability, we recently purchased an Electrovert Astrapak to replace our aging Hollis machine. The new machine features a dual wave for both leaded and SMT components as well as a spray fluxer. This machine will better compliment our surface-mount equipment and improve the quality of our assemblies.

TECH UPDATE

NULL STACK DRIVER AVAILABLE FOR WINDOWS

Last issue we mentioned availability of an NDIS 4.0 miniport driver for the COM20020. This network driver standard is used in a Windows machine to bind network adapters such as the PCX20, PCM20 and PCI20 to transport and network layer protocols such as TCP/IP and IPX/SPX. Although this provides a means to gain Internet access using ARCNET, it may not necessarily result in the highest performing driver due to the layered-software approach. For those customers seeking the highest possible performance and wanting to exploit ARCNET's deterministic token-passing protocol, the null stack driver may be the answer.

A null stack driver means that the application itself communicates directly to the network adapter bypassing the network and transport layers of the ISO protocol stack. Usually in a private network, there is no need for a network layer and the services of the transport layer (guaranteed delivery of a packet) are delegated to the application itself. With ARCNET this is not as difficult as its sounds since the ARCNET protocol automatically acknowledges received packets after error checking. ARCNET also has built-in flow control preventing buffer overflow on directed messages. These features are absent on technologies such as Ethernet which purposely relies upon the transport layer for guaranteed delivery.

Contemporary Controls offers two versions of a null stack driver-one for Windows 95, 98 and the other for Windows NT. Unlike the NDIS driver, there is no support for system code, fragmentation or exception packet handling. Of course, these services can be added in the application. The packets are considered "raw" ARCNET and the services provided include initialization, transmit, receive, status, register access, wake-on-receive and wake-on-transmit-complete.

The null stack driver was written for the company's COM20020 family of products and is available at our web site at www.ccontrol.com/drivers.htm.

APPLICATION	APPLICATION
DATA LINK	ARCNET
PHYSICAL	ARCNET

A null stack driver allows the application to directly communicate to the network adapter.

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EUROPE NEWS

Meeting New Challenges

In March 1999, Dawn Booth joined our team at Contemporary Controls Ltd in Coventry, England as the new Office Manager taking over from Alex Holloway. Dawn has extensive experience in both customer service and administration and is looking forward to her challenging new position. Having lived in Germany for 6 years and completed her MA in Applied Cultural Studies, Dawn is well aware of European issues and her language skills are already proving to be very useful.

"I am really looking forward to being part of a growing, friendly company and to be able to use all the skills I have brought with me. It is a challenge to join Contemporary Controls Limited at such an interesting time with the introduction of the Euro as a new trading currency and the continuing expansion and success of the Company in the European market." In her spare time Dawn continues to look for a new challenge and has recently been rock climbing, abseiling, kayaking, and crossbow shooting. On a more tranquil note Dawn also likes to go to the cinema and walk with her 2-year-old black Labrador.

DIALLING CODE CHANGES

The dialling code (area code) for telephone numbers in several areas of the UK is changing. From the 1st of June 1999, a new code comes into use for Coventry. Instead of dialling (0)1203, you should now use the new code, which is (0)24 76.

The old code will remain valid for several months yet, but please update your address books and any autodial equipment (speed-dial phones and faxes, etc.) with this information now.

The correct phone and fax numbers for Contemporary Controls Ltd. are now:
Phone: +44 (0)24 7641 3786.
Fax: +44 (0)24 7641 3923.

Further details on these changes, including the new codes for the other immediately-affected areas of the UK (Cardiff, London, Portsmouth, Southampton and Northern Ireland), can be found at www.numberchange.bt.com/.

Farewell to Alex

Alex Holloway, former Office Manager at CCL UK, left the company in March and fulfilled her ambition to practice acupuncture. Alex moved to Somerset, in South West England, and has started seeing patients in Weston-Super-Mare. "Setting up a Practice continues to challenge me, although my experience with CCL has certainly helped me to organize the administrative and financial side of the business. The main difficulty with acupuncture is that patients get better and stop coming back!"

Getting her name known in and around Weston is Alex's current task. She has made a good start by treating ex-substance misusers at a local rehabilitation centre using ear acupuncture. "The results are extremely positive" enthuses Alex, "these patients are now sleeping better, have stopped suffering intestinal cramps and are more relaxed in themselves. Although they were dubious about having treatment at first, they now love it." We hope to stay in touch with Alex and her new career. Alex has a final message: "I had to say goodbye to many great characters, both customers and colleagues, in March. I would like to take this opportunity to thank you all and wish you success for the future."

ATA NEWS

The board of directors of the ARCNET Trade Association has accepted the recommendation of its standards committee to adopt ATA 878.1-1999 as revision to ANSI/ATA 878.1. See related story in **the EXTENSION.**

CONTEMPORARY CONTROLS

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Address service requested.

Exciting News Inside

We've added a technology focus insert for you.

This issue:
Revisions to ANSI/ATA 878.1

WEIDMULLER
AUBREY KAGAN
DESIGN ENGINEER
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MARKHAM ON L3R 5H6
CANADA

0101/2303

Reminders and Product Interest Fax Back

Attention: Mail Sorter

Address Correction

Please do not remove or alter mailing label. For changes of address or other mailing instructions, check appropriate box and enter **"Return to Sender"** on the newsletter. ***We pay the postage.***

- ❑ Change name/address as shown
- ❑ Remove name from mailing list
- ❑ Duplicate label

Product Interest

- ❑ PCI Card
- ❑ Tutorial & Product Guide

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